



Computers are everywhere, touching every part of our lives. Home, work, shopping, schools ... You can't go far without hearing the familiar beep of a microprocessor. Uncle Sam uses a lot of electronic equipment too. According to the Environmental Protection Agency (EPA), the federal government buys 7 percent of the world's computers.

But these technological wonders are not designed to last forever. According to the National Safety Council, nearly 250 million computers will become obsolete in the next five years.

The federal government disposes of 10,000 computers every week. That's a lot of electronic trash. What happens to it? According to the EPA, a significant number end up in storage closets, warehouses and landfills, or overseas, where environmental standards are generally lower.

Conservation and Recovery Act (RCRA), Congress directed government agencies to promote recycling by increasing purchases of products containing recovered materials.

Every government agency falls under the Pollution Prevention Act and Executive Order 13101 to recycle and properly dispose of electronic equipment. Guidance is available from the following Web sites:

**Pollution Prevention Act** – (<http://www.fedcenter.gov/programs/p2/>) signed into law in 1990.

**Executive Order 13101** – (<http://www.ofee.gov/eo/13101.htm>), "Greening the Government through Waste Prevention, Recycling, and Federal Acquisition" signed into law in 1998.

### DRMS to the Rescue

The Defense Reutilization and Marketing Service (DRMS) is an agency within the Department of Defense and Defense Logistics Agency. DRMS works with the military services to reuse, recycle and dispose of excess material.

There are 89 Defense Reutilization and Marketing Offices (DRMO) located in 17 countries and 37 states on or near military installations. Military units turn-in excess or damaged property, with the proper paperwork, to their DRMO. Excess electronic equipment is redistributed on behalf of Defense agencies by DRMS or sold for reuse by a DRMS contractor resulting in extended life for electronic equipment, thus avoiding or postponing disposal.

Electronics, which cannot be redistrib-

uted or sold, are subjected to de-manufacturing processes that result in some additional reuse and recycling for the remainder of the electronic property. Environmental compliance is assured for Defense Department property, with 100 percent being reused or recycled.

Commercial recycling contractors or Federal Prison Industries perform all of the recycling and disassembly operations. Contracts are awarded under the Governmentwide Acquisition Contracts (GWAC) for Recycling Electronics and Asset Disposition (READ) services.

The contracts provide federal agencies with a dependable method of properly recycling and disposing of damaged or obsolete equipment. Eight companies were awarded contracts January 2005. For DRMS, all de-manufacturing partners are evaluated for technical capabilities and environmental compliance prior to entering into contracts or operating agreements.

Molam International, located near Atlanta, Ga., is one of eight companies recycling electronics for the government. According to company president Nader Nejad, DRMS keeps him busy. "We average 5 million pounds of material every year," Nejad said. "We recycle all of it — including the pallets."

Hazardous materials such as batteries and cathode ray tubes are removed and shipped to specialized recycling centers. The remaining material is shredded into 1 inch pieces and separated. Steel is removed and sent to a scrap metal dealer; plastic is recycled; and precious metals are sent to facilities in Europe where they are recovered.

Computer circuit boards and wiring have copper, gold and platinum in them. These materials can be ground into a fine powder and reused in new computers, according to Nejad.

"Working in partnership with the military services and contractors, the Precious Metals Recovery program recovered more than \$8 million in silver, gold, platinum and palladium in 2005," said John Barrett of the DRMS Precious Metals Recovery program.

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### e-Cycling Guidance

Legislation and presidential direction requiring the purchase of recycled content products have been evolving since 1976, when Congress established a buy-recycled law. In Section 6002 of the Resource



*Thousands of old computer circuit boards are collected and shredded, and precious metals such as gold are recovered for future use. Gold flakes like these add up. Working in partnership with the military services and contractors, the Precious Metals Recovery Program has saved the government \$250 million over the past 30 years.*

There are opportunities for federal and DoD agencies to save money by participating in the efforts described below.

**Reutilization:** A military unit that can use equipment turned-in to DRMS is money saved by not buying new equipment.

**Transfer/Donation:** Equipment donated to federal, state and local agencies saves tax dollars. These agencies will not need to purchase new equipment.

**Precious Metals Recovery:** Depending on the contract, either the material is sold and the funds returned to the U.S. Treasury, or it is held by DRMS for future use. For example, if a contractor is manufacturing an item that requires gold, the government can provide recovered gold at a reduced cost to reduce the cost of the contract.

**Sales:** DRMS gets a percentage of the revenues for material sold by its sales agents.

Agencies are required to remove classified information and sensitive data from all equipment prior to disposal. This equipment is not authorized for receipt by DRMS. But if any classified information or labels are discovered by DRMS or any of its agents, the electronics are immediately secured and steps are taken to return the equipment to the original owner for proper declassification procedures.

Sensitive data are slightly different. Only the original data owner can decide what data are sensitive, so the owner must place a certification on each computer stating that the storage media contain no sensitive data, prior to turn-in to DRMS. The DoD owner may choose to erase data,



degauss the storage media or remove the media from the equipment. Equipment without proper certification is rejected and returned to the original DoD owner.

The end of life process, de-manufacturing and recycling, sometimes result in a positive cash flow. At other times, it may be an expense, but expense is justified because all DoD activities achieve environmental compliance and protection of sensitive data in the processing of their electronic equipment through the DRMS de-manufacturing processes.

### ***Please e-Cycle!***

Tons of electronic material are saved from landfills and given a second life through recycling. DRMS provides good stewardship of taxpayer dollars and the environment by e-cycling computer components — everything except the beep!

DRMS provides DoD units worldwide with critical disposal services for material no longer needed for national defense. DRMS is responsible for property reuse (including resale), hazardous property disposal, demilitarization, precious metals recovery and recycling program support.

Additional recycling information is available on the Office of the Federal Environmental Executive Web site at <http://www.ofee.gov/eo/strtpln2.htm/>.

**For more information about DRMS, visit [www.dla.mil/drms/](http://www.dla.mil/drms/).**

*Van Williams is with the Battle Creek, Mich., DRMS Office of Public Affairs.*

CHIPS

## **DON CIO Personnel Recognized for Superior Government Service**

The Department of the Navy Chief Information Officer Dave Wennergren was recognized for his outstanding leadership with a John J. Franke Award. The John J. Franke Award has been given annually since 1999 to recognize individuals who make extraordinary long-term contributions to the federal government. Winners are senior government employees with 15 to 20 years of service, who typically have successfully led enterprise-wide initiatives across a government or Defense agency.

The award is named in memory of John J. Franke, who was director of the Federal Quality Institute at the Agriculture Department and a long-time president of the American Council for Technology (ACT), which sponsors the award. Each year, the award recipient is selected by a committee of the previous awardees.

With the Department of the Navy for 26 years, Wennergren has served as the DON CIO since 2002 and the vice chairman of the Federal CIO Council since January 2006. Wennergren received the award at the ACT/ Industry Advisory Council's annual Change Management Conference June 4, 2006.

John Lussier, Director of Operations, Telecom/Spectrum/Wireless Team Leader was recognized with the Federal CIO Council Leadership Award. The award is presented to federal employees for their outstanding achievements in improving the way government does business through information technology. The award was presented at the Interagency Resources Management Conference (IRMCO) in Williamsburg, Va.

Barbara Hoffman, Investment and Performance Management Team Leader was recognized with the Government Computer News IT Leadership Award. The award recognizes distinguished individuals from federal, state and local governments for their outstanding work in the field of government information technology. The award was presented at the Government Computer News third annual Government IT Leadership Awards Conference in Washington D.C.

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